

IN THE CLAIMS

1. (Currently Amended) A method of operating a client that retrieves resources using HyperText Transfer Protocol (HTTP) commands, the method comprising:

parsing a domain name field for a telephone number that identifies a point-to-point HTTP server;

comparing the parsed telephone number to any open telephone numbers identifying any open point-to-point HTTP connections;

when an open telephone number matching the parsed telephone number does not exist, accessing a public-switched-telephone-network line;

dialing, on the accessed line, a public-switched-telephone-network access the parsed telephone number for [[a]] the point-to-point HTTP server;

indicating that the client requests termination of the line as an HTTP connection to the point-to-point HTTP server; and

interacting with the point-to-point HTTP server over the accessed line using HTTP protocol requests and responses without the necessity of an intervening packet-routing network;

wherein interacting with the point-to-point HTTP server does not require connecting to an Internet Service Provider (ISP).

2. (Currently Amended) The method of claim 1, wherein the domain name field is included in a Uniform Resource Locator (URL) and is associated with a Domain Name Service (DNS) query, further comprising the client examining a uniform resource locator for a requested resource, and distinguishing from the contents of the uniform resource locator whether the requested resource is reachable via a point to point HTTP server.

3. (Currently Amended) The method of claim 2, wherein the domain name field does not include a domain name, wherein a uniform resource locator's contents indicate a point to point HTTP reachable resource by the presence of a point to point HTTP unique identifier in the service name field.

4. (Currently Amended) The method of claim 2, wherein ~~[[a]] the uniform resource locator's contents indicate~~ URL indicates a point-to-point-HTTP-reachable resource by the presence of a telephone number in the domain name field.

5. (Previously Presented) The method of claim 1, wherein indicating that the client requests termination of the line as an HTTP connection is accomplished over the PSTN and comprises transmitting at least one tone indicative of a point-to-point HTTP session, on the accessed line.

6. (Previously Presented) The method of claim 1, wherein indicating that the client requests termination of the line as an HTTP connection is accomplished over the PSTN and comprises requesting a TCP connection to a TCP port on the server designated for point-to-point HTTP service.

7. (Currently Amended) A method of operating point-to-point HTTP server, the method comprising:

- monitoring a public-switched-telephone-network line for incoming calls;
- when an incoming call indicates a point-to-point HTTP call type, terminating the call with a connection to the server;
- interacting with a client served by the connection using HTTP requests and responses;
- wherein interacting with the client does not require connecting to, or communicating with, an Internet Service Provider (ISP).

8. (Original) The method of claim 7, further comprising detecting that an incoming call is of a point-to-point call type by detecting a signal comprising at least one tone on the public-switched-telephone-network line, the signal indicative of a point-to-point HTTP call type.

9. (Previously Presented) The method of claim 7, further comprising detecting that an incoming call is of a point-to-point call type by designating a TCP port on the server for point-to-point HTTP service, and associating an incoming call requesting a connection to that TCP port as a request for point-to-point HTTP service.

10. (Original) The method of claim 7, further comprising requesting authentication of the client as an authorized user.

11. (Original) The method of claim 7, further comprising parsing a resource path present in an HTTP request received from the client, determining whether the resource path is for a resource available at the server, and when the resource path is for a resource not available at the server, determining whether the server can obtain the resource from a remote host.

12. (Original) The method of claim 11, where determining whether the server can obtain the resource from a remote host comprises parsing a host identifier from the resource path.

13. (Original) The method of claim 12, further comprising comparing the host identifier to identifiers contained in an information base available to the server.

14. (Original) The method of claim 11, wherein when the server determines that the resource is available from the remote host, the method further comprises requesting the resource from the remote host, receiving the resource from the remote host, and forwarding the resource to the client.

15. (Currently Amended) A point-to-point HTTP server comprising:
means for connecting the server to a public-switched-telephone-network line;
means for detecting an incoming call from an HTTP client on the public-switched-telephone-network line;
means for establishing a point-to-point HTTP session with an HTTP client on the public-switched-telephone-network line when an incoming call from an HTTP client is detected; and
means for interacting with an HTTP client over an established point-to-point HTTP session without the necessity of an intervening packet-routing network, an Internet Service Provider or a domain name lookup server.

16. (Previously Presented) The server of claim 15, further comprising means for serving HTTP requests from the HTTP client for resources that do not reside on the server.

17. (Currently Amended) A point-to-point HTTP server comprising:
a modem resource capable of connection to a public-switched-telephone-network line such that, when connected to the PSTN line, the modem resource can establish a link layer connection with a client using physical addressing;

a point-to-point HTTP service capable of serving non-packetized HTTP requests received over the link layer connection from the client via the modem resource without the necessity of an intervening packet-routing network.

18. (Previously Presented) The server of claim 17, wherein the modem resource is capable of establishing multiple link layer connections to different clients, and wherein the point-to-point HTTP service is capable of serving concurrent HTTP requests from multiple clients via the modem resource.

19. (Previously Presented) The server of claim 18, further comprising a TCP driver, wherein each client connects to the server by requesting a connection to a TCP port designated for the service, and the service identifies different clients by TCP socket.

20. (Previously Presented) The server of claim 17, further comprising a default resource to be returned to the client when the client submits an empty resource request.

21. (Previously Presented) The server of claim 17, further comprising an HTTP remote retrieval service capable of serving resources to a client, where those resources are not physically located on the server but are hosted on a separate host connected to the server by a data network.

22. (Previously Presented) The server of claim 17, wherein the modem resource comprises a data network tunnel to a remote network access device.

23. (Currently Amended) An HTTP-enabled appliance comprising:
a public-switched-telephone-network modem capable of initiating calls;
a processor capable of operating in conjunction with the public-switched-telephone-network modem so as to establish a link layer point-to-point HTTP session with a point-to-point HTTP server without being provided a domain name or a network address for the point-to-point HTTP server; and

a web browser capable of generating an HTTP request for transmission over an established link layer point-to-point HTTP session and capable of receiving a response to that request over the established link layer point-to-point HTTP session without being provided a domain name or a network address for the point-to-point HTTP server.

24. (Currently Amended) An HTTP-enabled appliance comprising:
means for initiating data calls over a public-switched-telephone network;
means for using a physical address to establish ~~establishing~~ a point-to-point HTTP session with a point-to-point HTTP server via the data call initiating means; and
means for generating an HTTP request for transmission over an established point-to-point HTTP session; and

means for receiving a response to the HTTP request over the established point-to-point HTTP session without the necessity of an intervening packet-routing network and without the necessity of a network address exchange.

25. (Currently Amended) An apparatus comprising a computer-readable medium containing computer instructions that, when executed, cause a processor or multiple communicating processors to perform a method for operating a client that retrieves resources using HTTP commands, the method comprising:

parsing a domain name lookup field for a telephone number that identifies a point-to-point HTTP server;

comparing the parsed telephone number to any open numbers identifying any open HTTP connections;

when an open number matching the parsed telephone number does not exist,
accessing a public-switched-telephone-network line;

dialing, on the accessed line, ~~a public-switched-telephone-network access~~ the parsed telephone number for [[a]] the point-to-point HTTP server;

indicating that the client requests termination of the line as an HTTP connection to the point-to-point HTTP server; and

interacting with the point-to-point HTTP server over the accessed line using HTTP protocol requests and responses.

26. (Currently Amended) An apparatus comprising a computer-readable medium containing computer instructions that, when executed, cause a processor or multiple communicating processors to perform a method for operating a point-to-point HTTP server, the method comprising:

monitoring a public-switched-telephone-network line for incoming calls;

comparing a transmitted indicator included in an incoming call to a predefined indicator;

when an incoming call indicates a point to point HTTP call type when the transmitted indicator matches the predefined indicator, terminating the call with a connection to the server;

interacting with a client served by the connection using HTTP requests and responses without the necessity of an intervening packet-routing network.

27. (New) The method of claim 1 further comprising closing an open connection associated with the open telephone number when the open telephone number does not match the parsed phone number.

28. (New) The HTTP-enabled appliance of claim 23 further comprising the processor opening a circuit switched connection when a telephone number substitutes a domain name in a domain name field.

29. (New) The HTTP-enabled appliance of claim 24 wherein a presence of a telephone number in a Uniform Resource Locator (URL) controls circuit switched connectivity.

30. (New) The method of claim 25 wherein a non-Internet-Service-Provider (ISP) connection is established with a website in response to the presence of a telephone number in a Uniform Resource Locator (URL) and an ISP connection is established with the website in response to the presence of a domain name in the URL.